SECTION 2. HAZARDS IDENTIFICATION

**GHS Classification**
- Flammable liquids: Category 2
- Skin irritation: Category 2
- Eye irritation: Category 2A
- Germ cell mutagenicity: Category 1B
- Carcinogenicity: Category 2
- Reproductive toxicity: Category 2
- Specific target organ toxicity - single exposure: Category 3 (Central nervous system)
- Specific target organ toxicity - repeated exposure (Inhalation): Category 2 (Auditory system, Eyes)
- Aspiration hazard: Category 1

**GHS Label element**

---

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

**Product identifier**
- FAST URETHANE REDUCER

**Other means of identification**

**Product code**
- UR-60

**Recommended use**
- SOLVENT

**Restrictions**
- FOR PROFESSIONAL USE ONLY

**Manufacturer/Importer/Supplier/Distributor information**

**Company name**
- TCPGlobal - Custom Shop

**Address**
- 6695 Rasha Street
  - San Diego, CA 92121
  - United States

**Telephone**
- (858) 909-2110

**Website**
- www.tcpglobal.com/Auto-Body/Custom-Shop

**Emergency phone number**
- EMERGENCY 24 Hrs.
- 800-424-9300 ChemTrec
Hazard pictograms:

Signal word: Danger

Hazard statements:
- H225 Highly flammable liquid and vapour.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.
- H340 May cause genetic defects.
- H351 Suspected of causing cancer.
- H361 Suspected of damaging fertility or the unborn child.
- H373 May cause damage to organs (Auditory system, Eyes) through prolonged or repeated exposure if inhaled.

Precautionary statements:

Prevention:
- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P233 Keep container tightly closed.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
- P264 Wash skin thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves/ eye protection/ face protection.
- P281 Use personal protective equipment as required.

Response:
- P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
- P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
- P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P331 Do NOT induce vomiting.
P332 + P313 IF skin irritation occurs: Get medical advice/attention.
P337 + P313 IF eye irritation persists: Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.
P370 + P378 IN case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

**Storage:**
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

**Disposal:**
P501 Dispose of contents/container to an approved waste disposal plant.

### Potential Health Effects

**Carcinogenicity:**

**IARC**
Group 2B: Possibly carcinogenic to humans

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-49-0</td>
<td>Naphtha (pet), hydrotreated</td>
</tr>
<tr>
<td></td>
<td>lt</td>
</tr>
<tr>
<td>64742-89-8</td>
<td>Solvent naphtha (pet), lt aliph.</td>
</tr>
</tbody>
</table>

**ACGIH**
No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**OSHA**
No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP**
No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

### Emergency Overview

<table>
<thead>
<tr>
<th>Appearance</th>
<th>liquid</th>
</tr>
</thead>
</table>


Colour: clear, colourless
Odour: characteristic
Hazard Summary: No information available.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture: Mixture

Hazardous components

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Chemical Name</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-64-1</td>
<td>Acetone</td>
<td>30 - 50</td>
</tr>
<tr>
<td>108-88-3</td>
<td>Toluene</td>
<td>20 - 30</td>
</tr>
<tr>
<td>64742-49-0</td>
<td>Naphtha (pet), hydrotreated lt</td>
<td>0 - 20</td>
</tr>
<tr>
<td>64742-89-8</td>
<td>Solvent naphtha (pet), lt aliph.</td>
<td>0 - 20</td>
</tr>
<tr>
<td>68410-97-9</td>
<td>Distillates, pet, lt dist hydrotreat process, low-boil</td>
<td>0 - 20</td>
</tr>
<tr>
<td>123-86-4</td>
<td>n-Butyl acetate</td>
<td>10 - 20</td>
</tr>
<tr>
<td>142-82-5</td>
<td>Heptane</td>
<td>0.1 - 1</td>
</tr>
</tbody>
</table>

Special Notes: Functionally equivalent petroleum streams may be found in this preparation at varying concentrations.

SECTION 4. FIRST AID MEASURES

General advice: Move out of dangerous area. Show this safety data sheet to the doctor in attendance. Symptoms of poisoning may appear several hours later. Do not leave the victim unattended.

If inhaled: Consult a physician after significant exposure. If unconscious place in recovery position and seek medical advice.

In case of skin contact: If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.

In case of eye contact: Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed:
- Keep respiratory tract clear.
- Do NOT induce vomiting.
- Do not give milk or alcoholic beverages.
- Never give anything by mouth to an unconscious person.
- If symptoms persist, call a physician.
- Take victim immediately to hospital.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media:
- Alcohol-resistant foam
- Carbon dioxide (CO2)
- Dry chemical

Unsuitable extinguishing media:
- High volume water jet

Specific hazards during firefighting:
- Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products:
- No hazardous combustion products are known

Specific extinguishing methods:
- Use a water spray to cool fully closed containers.

Further information:
- Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- For safety reasons in case of fire, cans should be stored separately in closed containments.

Special protective equipment for firefighters:
- Wear self-contained breathing apparatus for firefighting if necessary.

NFPA Flammable and Combustible Liquids Classification:
- Flammable Liquid Class IB

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and:
- Use personal protective equipment.
- Ensure adequate ventilation.
emergency procedures
Remove all sources of ignition.
Evacuate personnel to safe areas.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Environmental precautions
Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up
Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

Advice on safe handling
Avoid formation of aerosol.
Do not breathe vapours/dust.
Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Take precautionary measures against static discharges.
Provide sufficient air exchange and/or exhaust in work rooms.
Container may be opened only under exhaust ventilation hood.
Open drum carefully as content may be under pressure.
Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage
No smoking.
Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully re-sealed and kept upright to prevent leakage.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.
### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Components with workplace control parameters**

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Components</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-64-1</td>
<td>Acetone</td>
<td>TWA</td>
<td>500 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>750 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>250 ppm 590 mg/m³</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>1,000 ppm 2,400 mg/m³</td>
<td>OSHA Z-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>750 ppm 1,800 mg/m³</td>
<td>OSHA P0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>1,000 ppm 2,400 mg/m³</td>
<td>OSHA P0</td>
</tr>
<tr>
<td>108-88-3</td>
<td>Toluene</td>
<td>TWA</td>
<td>20 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>100 ppm 375 mg/m³</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ST</td>
<td>150 ppm 560 mg/m³</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>200 ppm</td>
<td>OSHA Z-2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CEIL</td>
<td>300 ppm</td>
<td>OSHA Z-2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Peak</td>
<td>500 ppm</td>
<td>OSHA Z-2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>100 ppm 375 mg/m³</td>
<td>OSHA P0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>150 ppm 560 mg/m³</td>
<td>OSHA P0</td>
</tr>
<tr>
<td>64742-49-0</td>
<td>Naphtha (pet), hydrotreated lt</td>
<td>TWA</td>
<td>500 ppm 2,000 mg/m³</td>
<td>OSHA Z-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>400 ppm 1,600 mg/m³</td>
<td>OSHA P0</td>
</tr>
<tr>
<td>64742-89-8</td>
<td>Solvent naphtha (pet), lt aliph.</td>
<td>TWA</td>
<td>500 ppm 2,000 mg/m³</td>
<td>OSHA Z-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>400 ppm 1,600 mg/m³</td>
<td>OSHA P0</td>
</tr>
<tr>
<td>123-86-4</td>
<td>n-Butyl acetate</td>
<td>TWA</td>
<td>150 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>200 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ST</td>
<td>200 ppm 950 mg/m³</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>150 ppm 710 mg/m³</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>150 ppm 710 mg/m³</td>
<td>OSHA Z-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>150 ppm 710 mg/m³</td>
<td>OSHA P0</td>
</tr>
</tbody>
</table>
### Biological occupational exposure limits

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Biological specimen</th>
<th>Sampling time</th>
<th>Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>Acetone</td>
<td>Urine</td>
<td>End of shift (As soon as possible after exposure ceases)</td>
<td>50 mg/l</td>
<td>ACGIH BEI</td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>Toluene</td>
<td>In blood</td>
<td>Prior to last shift of work-week</td>
<td>0.02 mg/l</td>
<td>ACGIH BEI</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Toluene</td>
<td>Urine</td>
<td>End of shift (As soon as possible after exposure ceases)</td>
<td>0.03 mg/l</td>
</tr>
<tr>
<td>o-Cresol</td>
<td></td>
<td></td>
<td>Urine</td>
<td>End of shift (As soon as possible after exposure ceases)</td>
<td>0.3 mg/g Creatinine</td>
<td>ACGIH BEI</td>
</tr>
</tbody>
</table>
### Personal protective equipment

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory protection</td>
<td>No personal respiratory protective equipment normally required.</td>
</tr>
<tr>
<td></td>
<td>In the case of vapour formation use a respirator with an approved filter.</td>
</tr>
<tr>
<td>Hand protection</td>
<td>The suitability for a specific workplace should be discussed with the producers of the protective gloves.</td>
</tr>
<tr>
<td>Eye protection</td>
<td>Eye wash bottle with pure water</td>
</tr>
<tr>
<td></td>
<td>Tightly fitting safety goggles</td>
</tr>
<tr>
<td></td>
<td>Wear face-shield and protective suit for abnormal processing problems.</td>
</tr>
<tr>
<td>Skin and body protection</td>
<td>impervious clothing</td>
</tr>
<tr>
<td></td>
<td>Choose body protection according to the amount and concentration of the dangerous substance at the workplace.</td>
</tr>
<tr>
<td>Hygiene measures</td>
<td>When using do not eat or drink.</td>
</tr>
<tr>
<td></td>
<td>When using do not smoke.</td>
</tr>
<tr>
<td></td>
<td>Wash hands before breaks and at the end of workday.</td>
</tr>
</tbody>
</table>

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>clear, colourless</td>
</tr>
<tr>
<td>Odour</td>
<td>characteristic</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling Point (Boiling point/boiling range)</td>
<td>56 - 140 °C (133 - 284 °F) (1013 hPa) Calculated Phase Transition Liquid/Gas</td>
</tr>
<tr>
<td>Flash point</td>
<td>&lt; -18 °C (-0.40 °F)</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>1</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
</tbody>
</table>
Burning rate: No data available

Upper explosion limit: 12.8 % (V)  
Calculated Explosive Limit

Lower explosion limit: 1.27 % (V)  
Calculated Explosive Limit

Vapour pressure: 231 mmHg @ 25 °C (77 °F)  
Calculated Vapor Pressure

Relative vapour density: > 1 (Air = 1.0)

Relative density: 0.801 @ 20 °C (68 °F)

Density: 0.801 g/cm3 @ 20 °C (68 °F)

Bulk density: No data available

Water solubility: No data available

Solubility in other solvents: No data available

Partition coefficient: n-octanol/water: No data available

Auto-ignition temperature: No data available

Thermal decomposition: No data available

---

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity: No dangerous reaction known under conditions of normal use.

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions: Product will not undergo hazardous polymerization. Vapours may form explosive mixture with air.

Conditions to avoid: Keep away from heat, flame, sparks and other ignition sources. Extremes of temperature and direct sunlight.

Incompatible materials: Acids alkalis
Amines
Ammonia
halogens
nitrates
organic absorbents such as sawdust, peat moss, ground corn cobs, etc.
Peroxides
Reducing agents
Strong oxidizing agents
Bases
metal salts

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:
Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg
Method: Calculation method

Components:
67-64-1:
Acute oral toxicity : LD50 (rat): 5,800 mg/kg
Acute inhalation toxicity : LC50 (rat): 76.0 mg/l
Exposure time: 4 h
Acute dermal toxicity : LD50 : > 7,426 mg/kg

108-88-3:
Acute oral toxicity : LD50 (rat, male): > 5,580 mg/kg
Acute inhalation toxicity : LC50 (rat, male and female): 28.1 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (rabbit): > 5,000 mg/kg

64742-49-0:
Acute oral toxicity : LD50 (rat, male and female): > 5,000 mg/kg
Method: OECD Test Guideline 401
GLP: yes

Acute inhalation toxicity : Remarks: No data available
<table>
<thead>
<tr>
<th>Substance</th>
<th>Acute dermal toxicity</th>
<th>Acute oral toxicity</th>
<th>Acute inhalation toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-89-8</td>
<td>LD50 (rabbit, male and female): &gt; 2,000 mg/kg</td>
<td>LD50 (rat, male and female): &gt; 5,000 mg/kg</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Method: OECD Test Guideline 402</td>
<td>Method: OECD Test Guideline 401</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GLP: yes</td>
<td>GLP: yes</td>
<td></td>
</tr>
<tr>
<td>68410-97-9</td>
<td>LD50 (rabbit, male and female): &gt; 2,000 mg/kg</td>
<td>LD50 (rat): &gt; 5,000 mg/kg</td>
<td>Remarks: No data available</td>
</tr>
<tr>
<td>123-86-4</td>
<td>LD50 (rat): &gt; 5,000 mg/kg</td>
<td>LC50 (rat, male and female): &gt; 21 mg/l</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Method: OECD Test Guideline 423</td>
<td>Exposure time: 4 h</td>
<td>Test atmosphere: vapour</td>
</tr>
<tr>
<td></td>
<td>GLP: no</td>
<td>Method: OECD Test Guideline 403</td>
<td>GLP: yes</td>
</tr>
<tr>
<td>142-82-5</td>
<td>LD50 (rat, male and female): 5,000 mg/kg</td>
<td>LC50 (rat, male and female): 73.5 mg/l</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Method: OECD Test Guideline 401</td>
<td>Exposure time: 4 h</td>
<td>Test atmosphere: vapour</td>
</tr>
<tr>
<td></td>
<td>Symptoms: Salivation</td>
<td>Method: OECD Test Guideline 403</td>
<td></td>
</tr>
</tbody>
</table>
Acute dermal toxicity

LD50 (rabbit, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes
Remarks: Information given is based on data obtained from similar substances.

Skin corrosion/irritation

**Product:**
Remarks: Irritating to skin.

**Components:**

**67-64-1:**
Species: rabbit
Exposure time: 24 h
Method: In vivo
Result: Mild skin irritation

**108-88-3:**
Species: rabbit
Exposure time: 4 h
Result: Irritating to skin.

**64742-49-0:**
Species: rabbit
Result: Irritating to skin.

**64742-89-8:**
Species: rabbit
Exposure time: 4 h
Result: Irritating to skin.

**68410-97-9:**
Species: rabbit
Result: Irritating to skin.

**123-86-4:**
Species: rabbit
Method: OECD Test Guideline 404
Result: No skin irritation
GLP: no

**142-82-5:**
Species: rabbit
Exposure time: 24 h
Method: OECD Test Guideline 404
Result: Irritating to skin.
GLP: yes
Remarks: Based on a similar product formulation.
**Serious eye damage/eye irritation**

**Product:**
Remarks: Irritating to eyes.

**Components:**

- **67-64-1:**
  Species: rabbit
  Result: Irritating to eyes.
  Exposure time: 24 h

- **108-88-3:**
  Species: rabbit
  Result: Irritating to eyes.
  Method: OECD Test Guideline 405

- **64742-49-0:**
  Species: rabbit
  Result: Irritating to eyes.

- **64742-89-8:**
  Species: rabbit
  Result: Irritating to eyes.

- **68410-97-9:**
  Species: rabbit
  Result: Irritating to eyes.

- **123-86-4:**
  Species: rabbit
  Result: No eye irritation
  GLP: yes

- **142-82-5:**
  Species: rabbit
  Result: Irritating to eyes.
  Method: OECD Test Guideline 405
  GLP: yes
  Remarks: Information given is based on data obtained from similar substances.

**Respiratory or skin sensitisation**

**Components:**

- **67-64-1:**
  Test Type: Maximization test
  Species: guinea pig
  Result: Did not cause sensitisation on laboratory animals.

- **108-88-3:**
  Test Type: Maximisation Test (GPMT)
Species: guinea pig
Result: Did not cause sensitisation on laboratory animals.
GLP: yes

64742-49-0:
Test Type: Buehler Test
Species: guinea pig
Result: Did not cause sensitisation on laboratory animals.

64742-89-8:
Test Type: Buehler Test
Species: guinea pig
Result: Did not cause sensitisation on laboratory animals.

123-86-4:
Species: guinea pig
Result: Did not cause sensitisation on laboratory animals.

142-82-5:
Test Type: Maximization test
Species: guinea pig
Method: OECD Test Guideline 406
Result: Does not cause skin sensitisation.
Remarks: Based on a similar product formulation.

Germ cell mutagenicity

Components:

67-64-1:
Genotoxicity in vitro:
Test Type: Mammalian cell gene mutation assay
Test species: Mouse lymphoma cells
Metabolic activation: Without metabolic activation
Method: OECD Test Guideline 476
Result: negative

: Test Type: Ames test
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

: Test Type: Chromosome aberration test in vitro
Test species: Chinese hamster ovary (CHO)
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative

Genotoxicity in vivo:
Test Type: In vivo micronucleus test
Test species: mouse
<table>
<thead>
<tr>
<th>Compound</th>
<th>Genotoxicity in vitro</th>
<th>Genotoxicity in vivo</th>
<th>Germ cell mutagenicity-assessment</th>
</tr>
</thead>
</table>
| 108-88-3 | Test Type: Mammalian cell gene mutation assay  
Test species: Mouse lymphoma cells  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 476  
Result: negative | Test Type: Dominant lethal assay  
Test species: mouse (male)  
Application Route: inhalation (vapour)  
Exposure time: 6 h/d, 5 d/wk for 8 wks  
Dose: 0, 100, 400 ppm  
Method: OECD Test Guideline 478  
Result: negative | Tests on bacterial or mammalian cell cultures did not show mutagenic effects. |
| 64742-49-0 | Mutagenicity classification not possible from current data | | |
| 64742-89-8 | Mutagenicity classification not possible from current data | | |
| 68410-97-9 | Test Type: Mammalian cell gene mutation assay  
Test species: mouse lymphoma cells  
Result: positive | Test Type: In vivo micronucleus test  
Test species: mouse  
Method: OECD Test Guideline 474  
Result: positive | Positive result(s) from in vivo heritable germ cell mutagenicity tests in mammals |
| 123-86-4 | Test Type: Chromosome aberration test in vitro | | |
Test species: Chinese hamster lung fibroblasts
Metabolic activation: Without metabolic activation
Method: OECD Test Guideline 473
Result: negative
GLP: No data available

Genotoxicity in vivo:
Test Type: In vivo micronucleus test
Test species: mouse (male and female)
Application Route: Oral
Dose: 500, 1000, 2000 mg/kg bw
Method: OECD Test Guideline 474
Result: negative
GLP: yes
Test substance: Information given is based on data obtained from similar substances.

Germ cell mutagenicity - Assessment:
Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

142-82-5:
Genotoxicity in vitro:
Test Type: Chromosome aberration test in vitro
Test species: Rat liver
Metabolic activation: Without metabolic activation
Method: OECD Test Guideline 473
Result: negative

Test Type: Ames test
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Germ cell mutagenicity - Assessment:
Did not show mutagenic effects in animal experiments.

Carcinogenicity

Components:
67-64-1:
Species: mouse, (female)
Application Route: Dermal
Exposure time: 365 d (90%) or 424 d (100%)
Dose: 0.1ml 90(71mg) or 100% (79mg)
Frequency of Treatment: 3 times per wk
NOAEL: 79

Result: did not display carcinogenic properties

Carcinogenicity - Assessment:
Carcinogenicity classification not possible from current data.
**108-88-3:**
Species: rat, (male and female)  
Application Route: inhalation (vapour)  
Exposure time: 103 wks  
Dose: 0, 600, 1200 ppm  
Frequency of Treatment: 6.5 h/d, 5 d/wk  
NOAEL: No observed adverse effect level: 1,200 ppm

Method: OECD Test Guideline 453  
Result: did not display carcinogenic properties  
Symptoms: Erosion of nasal epithelium  
GLP: yes

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

**64742-49-0:**
Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

**64742-89-8:**
Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

**68410-97-9:**
Species: mouse  
NOAEL: 50 mg/kg bw/day

Method: OECD Test Guideline 451  
Result: evidence of carcinogenic activity

Carcinogenicity - Assessment : Possible human carcinogen

**123-86-4:**
Remarks: This information is not available.

Carcinogenicity - Assessment : No evidence of carcinogenicity in animal studies.

**142-82-5:**
Remarks: This information is not available.

Carcinogenicity - Assessment : Carcinogenicity classification not possible from current data.

**Reproductive toxicity**

**Components:**
**67-64-1:**

Effects on fertility
- **Species:** rat, male
- **Application Route:** oral
- **Dose:** 0, 5000, 10000 mg/L
- **Frequency of Treatment:** 7 days/week
- **General Toxicity - Parent:** LOAEL: 10,000
- **Fertility:** 10,000

Effects on foetal development
- **Species:** rat
- **Application Route:** Inhalation
- **Dose:** 0, 440, 2200, 11000 ppm
- **Frequency of Treatment:** 7 days/week
- **General Toxicity Maternal:** NOAEC: 2,200 ppm
- **Teratogenicity:** NOAEC: 11,000 ppm
- **Embryo-foetal toxicity:** NOAEC: 2,200 ppm
- **Method:** OECD Test Guideline 414
- **Result:** No teratogenic potential.
- **GLP:** No data available

Reproductive toxicity - Assessment
- **No evidence of adverse effects on sexual function and fertility, and on development, based on animal experiments.**

**108-88-3:**

Effects on fertility
- **Test Type:** Two-generation study
- **Species:** rat, male and female
- **Application Route:** Inhalation
- **Dose:** 0, 100, 500, 2000 ppm
- **Frequency of Treatment:** 7 days/week
- **General Toxicity - Parent:** NOAEC: 500 ppm
- **General Toxicity F1:** NOAEC: 500 ppm
- **Fertility:** NOAEC: 2,000 ppm
- **Symptoms:** Reduced maternal body weight gain. Reduced offspring weight gain.
- **Method:** OECD Test Guideline 416
- **Result:** Animal testing did not show any effects on fertility.
- **GLP:** yes

Test Type: Fertility
- **Species:** rat, male and female
- **Application Route:** inhalation (vapour)
- **Dose:** 0, 600, 1200 ppm
- **Frequency of Treatment:** 7 days/week
- **General Toxicity - Parent:** NOAEC: 600 ppm
- **Symptoms:** Decreased sperm count
- **Result:** Animal testing did not show any effects on fertility.

Effects on foetal development
- **Species:** rat
<table>
<thead>
<tr>
<th>Substance</th>
<th>Application Route</th>
<th>Dose</th>
<th>Duration of Single Treatment</th>
<th>Frequency of Treatment</th>
<th>General Toxicity Maternal</th>
<th>Developmental Toxicity</th>
<th>Symptoms</th>
<th>GLP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>inhalation (vapour)</td>
<td>0, 250, 750, 1500, 3000 ppm</td>
<td>10 d</td>
<td>6 hr/day</td>
<td>750 ppm</td>
<td>750 ppm</td>
<td>Maternal toxicity, Reduced body weight, Skeletal malformations.</td>
<td>yes</td>
</tr>
</tbody>
</table>

**Reproductive toxicity - Assessment**: Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.

**64742-49-0**: Reproductive toxicity - Assessment : Fertility classification not possible from current data. Embryotoxicity classification not possible from current data.

**64742-89-8**: Reproductive toxicity - Assessment : Fertility classification not possible from current data. Embryotoxicity classification not possible from current data.

**68410-97-9**: Reproductive toxicity - Assessment : Fertility classification not possible from current data. Embryotoxicity classification not possible from current data.


**Effects on foetal development** : Species: rat, male and female Application Route: vapour Dose: 500, 1500, 3000 ppm Duration of Single Treatment: 6 h Frequency of Treatment: 5 days/week GLP: yes

**Reproductive toxicity**: Fertility classification not possible from current data.
Assessment

Embryotoxicity classification not possible from current data.

142-82-5:
Effects on fertility

Test Type: Two-generation study
Species: rat, male and female
Application Route: vapour
Dose: 0, 900, 3000, 9000 ppm
Frequency of Treatment: 5 days/week
General Toxicity - Parent: NOAEC: 3,000 ppm
General Toxicity F1: NOAEC: 3,000 ppm
Fertility: NOAEC: 9,000 ppm
Symptoms: Reduced maternal body weight gain. Reduced offspring weight gain.
Method: OECD Test Guideline 416
Result: No reproductive effects.
GLP: yes
Remarks: Information given is based on data obtained from similar substances.

Effects on foetal development

Species: mouse
Application Route: inhalation (vapour)
Dose: 0, 900, 3000, 9000 ppm
Duration of Single Treatment: 10 d
Frequency of Treatment: 6 hr/day
General Toxicity Maternal: NOAEC: 900 ppm
Developmental Toxicity: NOAEC: 3,000 ppm
Symptoms: Skeletal malformations.
Method: OECD Test Guideline 414
GLP: yes
Remarks: Information given is based on data obtained from similar substances.

Reproductive toxicity - Assessment

Animal testing did not show any effects on fertility. Embryotoxicity classification not possible from current data.

STOT - single exposure

Product: No data available
Components:
67-64-1:

<table>
<thead>
<tr>
<th>Exposure routes:</th>
<th>Target Organs:</th>
<th>Assessment:</th>
<th>Remarks:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Central nervous system</td>
<td>May cause drowsiness or dizziness. The substance or mixture is classified as specific target organ toxicant, single exposure, cate-</td>
<td></td>
</tr>
<tr>
<td>Exposure routes:</td>
<td>Target Organs:</td>
<td>Assessment:</td>
<td>Remarks:</td>
</tr>
<tr>
<td>-----------------</td>
<td>----------------</td>
<td>-------------</td>
<td>----------</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Central nervous system</td>
<td>May cause drowsiness or dizziness. The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.</td>
<td></td>
</tr>
</tbody>
</table>

64742-49-0:

<table>
<thead>
<tr>
<th>Exposure routes:</th>
<th>Target Organs:</th>
<th>Assessment:</th>
<th>Remarks:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Central nervous system</td>
<td>May cause drowsiness or dizziness. The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.</td>
<td></td>
</tr>
</tbody>
</table>

64742-89-8: No data available

68410-97-9:

<table>
<thead>
<tr>
<th>Exposure routes:</th>
<th>Target Organs:</th>
<th>Assessment:</th>
<th>Remarks:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Central nervous system</td>
<td>May cause drowsiness or dizziness. The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.</td>
<td></td>
</tr>
</tbody>
</table>

123-86-4:

<table>
<thead>
<tr>
<th>Exposure routes:</th>
<th>Target Organs:</th>
<th>Assessment:</th>
<th>Remarks:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Central nervous system</td>
<td>May cause drowsiness or dizziness. The substance or</td>
<td></td>
</tr>
</tbody>
</table>
mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

<table>
<thead>
<tr>
<th>Exposure routes</th>
<th>Target Organs:</th>
<th>Assessment:</th>
<th>Remarks:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Central nervous system</td>
<td>May cause drowsiness or dizziness, The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.</td>
<td></td>
</tr>
</tbody>
</table>

**STOT - repeated exposure**

**Product:** No data available

**Components:**

- **67-64-1:** No data available

**108-88-3:**

<table>
<thead>
<tr>
<th>Exposure routes</th>
<th>Target Organs:</th>
<th>Assessment:</th>
<th>Remarks:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Auditory system, Eyes</td>
<td>May cause damage to organs through prolonged or repeated exposure, The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.</td>
<td></td>
</tr>
</tbody>
</table>

- **64742-49-0:** No data available

- **64742-89-8:** No data available
Repeated dose toxicity

Components:

67-64-1:
Species: mouse, male
NOAEL: 20000
Application Route: Oral
Exposure time: 13 wk
Number of exposures: daily
Dose: 1250, 2500, 5000, 10000, 20000
Method: OECD Test Guideline 408
GLP: No data available

Species: mouse, female
NOAEL: 20000
LOAEL: 50000
Application Route: Oral
Exposure time: 13 wk
Number of exposures: daily
Dose: 2500, 5000, 10000, 20000, 5000
Method: OECD Test Guideline 408
GLP: No data available

Repeated dose toxicity - Assessment: Causes mild skin irritation., Causes serious eye irritation.

108-88-3:
Species: rat, male and female
NOAEL: 300
Application Route: inhalation (vapour)
Exposure time: 6, 12, or 18 mths
Number of exposures: 6 h/d, 5 d/wk
Dose: 0, 30, 100, 300 ppm
Method: OECD Test Guideline 453

Repeated dose toxicity - Assessment: Causes skin irritation.

64742-89-8:
Species: rat, male and female
NOAEL: 1402
Application Route: inhalation (vapour)
Test atmosphere: vapour
Exposure time: 13 weeks
Number of exposures: 6 hours/day, 5 days/week
Dose: 322, 1402, 9869 mg/m³
GLP: yes
Target Organs: Kidney
Symptoms: Nasal and ocular discharge

123-86-4:
Species: rat, male and female
NOAEL: 500
Application Route: inhalation (vapour)
Exposure time: 13 wk
Number of exposures: 6 h/d, 5d/wk
Dose: 500, 1500, 3000 ppm
GLP: yes
Symptoms: oral or nasal discharge

142-82-5:
Species: rat, male
NOAEL: 12470 mg/m³
Application Route: inhalation (vapour)
Exposure time: 16 wks
Number of exposures: 12 h/d, 7 d/wk
Dose: 0, 12470 mg/3
Repeated dose toxicity - Assessment
Causes skin irritation.

Aspiration toxicity

Components:
108-88-3:
Aspiration Toxicity - Category 1

64742-49-0:
May be fatal if swallowed and enters airways.

64742-89-8:
May be fatal if swallowed and enters airways.

68410-97-9:
May be fatal if swallowed and enters airways.

142-82-5:
Aspiration Toxicity - Category 1
**Further information**

**Product:**
Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

---

**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Components:**

**67-64-1:**

<table>
<thead>
<tr>
<th>Toxicity to fish</th>
<th>LC50 (Oncorhynchus mykiss (rainbow trout)): 6,100 mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposure time</td>
<td>48 h</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Toxicity to daphnia and other aquatic invertebrates</th>
<th>EC50 (Daphnia magna (Water flea)): 7,630 mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposure time</td>
<td>48 h</td>
</tr>
<tr>
<td>Test substance</td>
<td>Acetone</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Toxicity to algae</th>
<th>Remarks: No data available</th>
</tr>
</thead>
</table>

**108-88-3:**

<table>
<thead>
<tr>
<th>Toxicity to fish</th>
<th>LC50 (Oncorhynchus mykiss (rainbow trout)): 5.5 mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposure time</td>
<td>96 h</td>
</tr>
<tr>
<td>Test Type</td>
<td>flow-through test</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Toxicity to daphnia and other aquatic invertebrates</th>
<th>EC50 (Ceriodaphnia dubia): 3.78 mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposure time</td>
<td>48 h</td>
</tr>
<tr>
<td>Test Type</td>
<td>Renewal</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Toxicity to algae</th>
<th>EC50 (Chlorella vulgaris (Fresh water algae)): 134 mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposure time</td>
<td>3 h</td>
</tr>
<tr>
<td>Test Type</td>
<td>static test</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Toxicity to bacteria</th>
<th>IC50 (Bacteria): 84 mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposure time</td>
<td>24 h</td>
</tr>
<tr>
<td>Test Type</td>
<td>Static</td>
</tr>
</tbody>
</table>

**Ecotoxicology Assessment**

**Acute aquatic toxicity**: Toxic to aquatic life.

**Chronic aquatic toxicity**: Toxic to aquatic life with long lasting effects.
**64742-49-0:**

Toxicity to fish: LC50 (Oncorhynchus mykiss (rainbow trout)): 10 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates:
EC50 (Daphnia magna (Water flea)): 4.5 mg/l
Exposure time: 48 h

Toxicity to algae:
EC50 (Pseudokirchneriella subcapitata (green algae)):
3.71 mg/l
Exposure time: 96 h

Ecotoxicology Assessment
Acute aquatic toxicity: Toxic to aquatic life.
Chronic aquatic toxicity: Toxic to aquatic life with long lasting effects.

**64742-89-8:**

Toxicity to fish:
LC50 (Oncorhynchus mykiss (rainbow trout)): 8.2 mg/l
Exposure time: 96 h
Test Type: semi-static test

Toxicity to daphnia and other aquatic invertebrates:
EC50 (Daphnia magna (Water flea)): 4.5 mg/l
Exposure time: 48 h
Test Type: Immobilization
Analytical monitoring: yes

Toxicity to algae:
EC50 (Pseudokirchneriella subcapitata (green algae)):
3.7 mg/l
Exposure time: 96 h
Test Type: static test

Ecotoxicology Assessment
Acute aquatic toxicity: Toxic to aquatic life.
Chronic aquatic toxicity: Toxic to aquatic life with long lasting effects.

**68410-97-9:**

Toxicity to fish:
LC50 (Pimephales promelas (fathead minnow)): 8.2 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates:
EC50 (Daphnia magna (Water flea)): 4.5 mg/l
Exposure time: 48 h

Toxicity to algae:
EC50 (Pseudokirchneriella subcapitata (green algae)):
3.1 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

Ecotoxicology Assessment
Acute aquatic toxicity: Toxic to aquatic life.
Chronic aquatic toxicity: Toxic to aquatic life with long lasting effects.

**123-86-4:**
Toxicity to fish:
- EC50 (Pimephales promelas (fathead minnow)): 18 mg/l
  - Exposure time: 96 h
  - Test Type: flow-through test
  - Method: OECD Test Guideline 203
  - GLP: no

Toxicity to daphnia and other aquatic invertebrates:
- EC50 (Daphnia magna (Water flea)): 44 mg/l
  - Exposure time: 48 h
  - Test Type: static test

Toxicity to algae:
- EC50 (Desmodesmus subspicatus (green algae)): 674.7 mg/l
  - End point: Growth rate
  - Exposure time: 72 h

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):
- NOEC (Daphnia magna (Water flea)): 23 mg/l
  - Exposure time: 21 d

Toxicity to bacteria:
- EC 50 (Tetrahymena pyriformis (Ciliate)): 356 mg/l
  - Exposure time: 40 h
  - Test Type: Static

Ecotoxicology Assessment
Acute aquatic toxicity: Harmful to aquatic life.
Chronic aquatic toxicity: Harmful to aquatic life with long lasting effects.

**142-82-5:**
Toxicity to fish:
- LC50 (Carassius auratus (goldfish)): 4 mg/l
  - Exposure time: 24 h
  - Remarks: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Toxicity to daphnia and other aquatic invertebrates:
- EC50 (Daphnia magna (Water flea)): 1.5 mg/l
  - Exposure time: 48 h
  - Test Type: static test
  - Remarks: Very toxic to aquatic organisms.

Toxicity to algae:
- Remarks: No data available
Ecotoxicology Assessment
Acute aquatic toxicity: Very toxic to aquatic life.
Chronic aquatic toxicity: Very toxic to aquatic life with long lasting effects.

**Persistence and degradability**

**Components:**

**67-64-1:**
Biodegradability: Remarks: Readily biodegradable

**108-88-3:**
Biodegradability: Inoculum: Sewage
Biodegradation: 100 %
Remarks: Readily biodegradable

**64742-49-0:**
Biodegradability: aerobic
Inoculum: activated sludge
Concentration: 20 mg/l
Biodegradation: 74.30 %
Exposure time: 56 d
GLP: yes
Remarks: Inherently biodegradable.

**64742-89-8:**
Biodegradability: Concentration: 49.2 mg/l
Result: Readily biodegradable.
Biodegradation: 77 %
Testing period: 2 d
Exposure time: 28 d
GLP: yes

**123-86-4:**
Biodegradability: Biodegradation: 83 %
Exposure time: 28 d
Method: OECD Test Guideline 301D

**Chemical Oxygen Demand (COD):** 0.00169 mg/g

**BOD/COD:** BOD/COD: 72 %

**Theoritical Oxygen Demand (ThOD):** 0.0022 mg/g

**142-82-5:**
Biodegradability

- Primary biodegradation
- Inoculum: activated sludge
- Concentration: 100 mg/l
- Biodegradation: 100 %
- Testing period: 2 d
- Exposure time: 25 d
- Remarks: Readily biodegradable

Bioaccumulative potential

**Components:**

- **67-64-1:**
  - Partition coefficient: n-octanol/water
  - log Pow: -0.24

- **108-88-3:**
  - Partition coefficient: n-octanol/water
  - log Pow: 2.73

- **64742-49-0:**
  - Partition coefficient: n-octanol/water
  - Remarks: No data available

- **64742-89-8:**
  - Partition coefficient: n-octanol/water
  - log Pow: 2.13 - 4.85 (25 °C)

- **123-86-4:**
  - Bioaccumulation: Species: Fish
  - Bioconcentration factor (BCF): 15
  - Partition coefficient: n-octanol/water
  - log Pow: 1.82

Mobility in soil

- No data available

Other adverse effects

- No data available

**Product:**

- Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
- Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).
- Additional ecological in-
formation event of unprofessional handling or disposal., Toxic to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues: Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact NEXEO's Environmental Services Group at 800-637-7922.

Contaminated packaging: Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

IATA (International Air Transport Association): UN1263, PAINT RELATED MATERIAL, 3, II, Flash Point:-18 °C(-0.40 °F)

IMDG (International Maritime Dangerous Goods): UN1263, PAINT RELATED MATERIAL, 3, II

DOT (Department of Transportation): UN1263, PAINT RELATED MATERIAL, 3, II

SECTION 15. REGULATORY INFORMATION

OSHA Hazards: Flammable liquid, Carcinogen, Moderate skin irritant, Moderate eye irritant, Teratogen, Reproductive hazard, Mutagen, Aspiration hazard

WHMIS Classification: B2: Flammable liquid D2A: Very Toxic Material Causing Other Toxic Effects D2B: Toxic Material Causing Other Toxic Effects

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Component</th>
<th>Calculated product</th>
</tr>
</thead>
</table>


Toluene | RQ (lbs) | RQ (lbs)
---|---|---
108-88-3 | 1000 | 4609

**SARA 304 Extremely Hazardous Substances Reportable Quantity**
This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards**
- Fire Hazard
- Chronic Health Hazard
- Acute Health Hazard

**Clean Air Act**
The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

<table>
<thead>
<tr>
<th>RQ (lbs)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>108-88-3 Toluene</td>
<td>21.6945 %</td>
</tr>
<tr>
<td>71-43-2 Benzene</td>
<td>0.0421 %</td>
</tr>
<tr>
<td>100-41-4 Ethylbenzene</td>
<td>0.0396 %</td>
</tr>
<tr>
<td>110-54-3 Hexane</td>
<td>0.0035 %</td>
</tr>
<tr>
<td>67-56-1 Methanol</td>
<td>0.003 %</td>
</tr>
<tr>
<td>91-20-3 Naphthalene</td>
<td>0.0003 %</td>
</tr>
<tr>
<td>98-82-8 Cumene</td>
<td>0.0001 %</td>
</tr>
</tbody>
</table>

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

<table>
<thead>
<tr>
<th>RQ (lbs)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-64-1 Acetone</td>
<td>49.3264 %</td>
</tr>
<tr>
<td>108-88-3 Toluene</td>
<td>21.6945 %</td>
</tr>
<tr>
<td>123-86-4 n-Butyl acetate</td>
<td>11.003 %</td>
</tr>
<tr>
<td>110-82-7 Cyclohexane</td>
<td>0.4498 %</td>
</tr>
<tr>
<td>71-43-2 Benzene</td>
<td>0.0421 %</td>
</tr>
<tr>
<td>100-41-4 Ethylbenzene</td>
<td>0.0396 %</td>
</tr>
<tr>
<td>1330-20-7 Mixed xylenes</td>
<td>0.0233 %</td>
</tr>
<tr>
<td>67-56-1 Methanol</td>
<td>0.003 %</td>
</tr>
<tr>
<td>98-82-8 Cumene</td>
<td>0.0001 %</td>
</tr>
</tbody>
</table>

**Clean Water Act**
The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

<table>
<thead>
<tr>
<th>RQ (lbs)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>108-88-3 Toluene</td>
<td>21.6945 %</td>
</tr>
<tr>
<td>123-86-4 n-Butyl acetate</td>
<td>11.003 %</td>
</tr>
<tr>
<td>110-82-7 Cyclohexane</td>
<td>0.4498 %</td>
</tr>
<tr>
<td>71-43-2 Benzene</td>
<td>0.0421 %</td>
</tr>
<tr>
<td>100-41-4 Ethylbenzene</td>
<td>0.0396 %</td>
</tr>
<tr>
<td>1330-20-7 Mixed xylenes</td>
<td>0.0233 %</td>
</tr>
<tr>
<td>91-20-3 Naphthalene</td>
<td>0.0003 %</td>
</tr>
</tbody>
</table>

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

<table>
<thead>
<tr>
<th>RQ (lbs)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>108-88-3 Toluene</td>
<td>21.6945 %</td>
</tr>
<tr>
<td>123-86-4 n-Butyl acetate</td>
<td>11.003 %</td>
</tr>
<tr>
<td>110-82-7 Cyclohexane</td>
<td>0.4498 %</td>
</tr>
<tr>
<td>71-43-2 Benzene</td>
<td>0.0421 %</td>
</tr>
<tr>
<td>Code</td>
<td>Substance</td>
</tr>
<tr>
<td>----------</td>
<td>--------------------</td>
</tr>
<tr>
<td>100-41-4</td>
<td>Ethylbenzene</td>
</tr>
<tr>
<td>1330-20-7</td>
<td>Mixed xylenes</td>
</tr>
<tr>
<td>91-20-3</td>
<td>Naphthalene</td>
</tr>
</tbody>
</table>

This product contains the following toxic pollutants listed under the U.S. Clean Water Act Section 307:

<table>
<thead>
<tr>
<th>Code</th>
<th>Substance</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>108-88-3</td>
<td>Toluene</td>
<td>21.6945 %</td>
</tr>
</tbody>
</table>

US State Regulations

Massachusetts Right To Know

<table>
<thead>
<tr>
<th>Code</th>
<th>Substance</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-64-1</td>
<td>Acetone</td>
<td>30 - 50 %</td>
</tr>
<tr>
<td>108-88-3</td>
<td>Toluene</td>
<td>20 - 30 %</td>
</tr>
<tr>
<td>123-86-4</td>
<td>n-Butyl acetate</td>
<td>10 - 20 %</td>
</tr>
<tr>
<td>71-43-2</td>
<td>Benzene</td>
<td>0 - 0.1 %</td>
</tr>
</tbody>
</table>

Pennsylvania Right To Know

<table>
<thead>
<tr>
<th>Code</th>
<th>Substance</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-64-1</td>
<td>Acetone</td>
<td>30 - 50 %</td>
</tr>
<tr>
<td>108-88-3</td>
<td>Toluene</td>
<td>20 - 30 %</td>
</tr>
<tr>
<td>64742-49-0</td>
<td>Naphtha (pet), hydrotreated lt</td>
<td>0 - 20 %</td>
</tr>
<tr>
<td>64742-89-8</td>
<td>Solvent naphtha (pet), lt aliph.</td>
<td>0 - 20 %</td>
</tr>
<tr>
<td>68410-97-9</td>
<td>Distillates, pet, lt dist hydrotreat process, low-boil</td>
<td>0 - 20 %</td>
</tr>
<tr>
<td>123-86-4</td>
<td>n-Butyl acetate</td>
<td>10 - 20 %</td>
</tr>
<tr>
<td>110-82-7</td>
<td>Cyclohexane</td>
<td>0.1 - 1 %</td>
</tr>
<tr>
<td>71-43-2</td>
<td>Benzene</td>
<td>0 - 0.1 %</td>
</tr>
<tr>
<td>100-41-4</td>
<td>Ethylbenzene</td>
<td>0 - 0.1 %</td>
</tr>
<tr>
<td>1330-20-7</td>
<td>Mixed xylenes</td>
<td>0 - 0.1 %</td>
</tr>
</tbody>
</table>

New Jersey Right To Know

<table>
<thead>
<tr>
<th>Code</th>
<th>Substance</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-64-1</td>
<td>Acetone</td>
<td>30 - 50 %</td>
</tr>
<tr>
<td>108-88-3</td>
<td>Toluene</td>
<td>20 - 30 %</td>
</tr>
<tr>
<td>64742-49-0</td>
<td>Naphtha (pet), hydrotreated lt</td>
<td>0 - 20 %</td>
</tr>
<tr>
<td>64742-89-8</td>
<td>Solvent naphtha (pet), lt aliph.</td>
<td>0 - 20 %</td>
</tr>
<tr>
<td>68410-97-9</td>
<td>Distillates, pet, lt dist hydrotreat process, low-boil</td>
<td>0 - 20 %</td>
</tr>
<tr>
<td>123-86-4</td>
<td>n-Butyl acetate</td>
<td>10 - 20 %</td>
</tr>
</tbody>
</table>

California Prop 65

WARNING! This product contains a chemical known to the State of California to cause cancer.

<table>
<thead>
<tr>
<th>Code</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>71-43-2</td>
<td>Benzene</td>
</tr>
<tr>
<td>100-41-4</td>
<td>Ethylbenzene</td>
</tr>
<tr>
<td>91-20-3</td>
<td>Naphthalene</td>
</tr>
<tr>
<td>98-82-8</td>
<td>Cumene</td>
</tr>
</tbody>
</table>

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

<table>
<thead>
<tr>
<th>Code</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>108-88-3</td>
<td>Toluene</td>
</tr>
<tr>
<td>71-43-2</td>
<td>Benzene</td>
</tr>
<tr>
<td>67-56-1</td>
<td>Methanol</td>
</tr>
</tbody>
</table>
The components of this product are reported in the following inventories:

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Status</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switzerland. New notified substances and declared preparations</td>
<td>y (positive listing)</td>
<td>(The formulation contains substances listed on the Swiss Inventory)</td>
</tr>
<tr>
<td>United States TSCA Inventory</td>
<td>y (positive listing)</td>
<td>(On TSCA Inventory)</td>
</tr>
<tr>
<td>Canadian Domestic Substances List (DSL)</td>
<td>y (positive listing)</td>
<td>(All components of this product are on the Canadian DSL.)</td>
</tr>
<tr>
<td>Australia Inventory of Chemical Substances (AICS)</td>
<td>y (positive listing)</td>
<td>(On the inventory, or in compliance with the inventory)</td>
</tr>
<tr>
<td>New Zealand. Inventory of Chemical Substances</td>
<td>n (Negative listing)</td>
<td>(Not in compliance with the inventory)</td>
</tr>
<tr>
<td>Japan. ENCS - Existing and New Chemical Substances Inventory</td>
<td>n (Negative listing)</td>
<td>(Not in compliance with the inventory)</td>
</tr>
<tr>
<td>Japan. ISHL - Inventory of Chemical Substances (METI)</td>
<td>n (Negative listing)</td>
<td>(Not in compliance with the inventory)</td>
</tr>
<tr>
<td>Korea. Korean Existing Chemicals Inventory (KECI)</td>
<td>y (positive listing)</td>
<td>(On the inventory, or in compliance with the inventory)</td>
</tr>
<tr>
<td>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>y (positive listing)</td>
<td>(On the inventory, or in compliance with the inventory)</td>
</tr>
<tr>
<td>China. Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>y (positive listing)</td>
<td>(On the inventory, or in compliance with the inventory)</td>
</tr>
</tbody>
</table>
SECTION 16. OTHER INFORMATION

VERSION 2.0
REVISION DATE 10/20/2016

NFPA:

Health

Flammability

Instability

Special hazard.

HMIS III:

HEALTH

FLAMMABILITY

PHYSICAL HAZARD

2*

3

0

0 = not significant, 1 = Slight, 2 = Moderate, 3 = High, 4 = Extreme, * = Chronic

The information accumulated is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made become available subsequently to the date hereof, we do not assume any responsibility for the results of its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

Legacy MSDS: R0365914

Material number:

<table>
<thead>
<tr>
<th>Key or legend to abbreviations and acronyms used in the safety data sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
</tr>
<tr>
<td>AICS</td>
</tr>
<tr>
<td>DSL</td>
</tr>
<tr>
<td>NDSL</td>
</tr>
<tr>
<td>CNS</td>
</tr>
<tr>
<td>CAS</td>
</tr>
<tr>
<td>Abbreviation</td>
</tr>
<tr>
<td>--------------</td>
</tr>
<tr>
<td>EC50</td>
</tr>
<tr>
<td>EC50</td>
</tr>
<tr>
<td>EGEST</td>
</tr>
<tr>
<td>EOSCA</td>
</tr>
<tr>
<td>EINECS</td>
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<tr>
<td>MAK</td>
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<td>GHS</td>
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<tr>
<td>&gt;=</td>
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<tr>
<td>IC50</td>
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<tr>
<td>IARC</td>
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<tr>
<td>IECSC</td>
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<tr>
<td>ENCS</td>
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<tr>
<td>KECI</td>
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<tr>
<td>&lt;=</td>
</tr>
<tr>
<td>LC50</td>
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</tbody>
</table>